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CANADA'S Livestock and Meat Industry

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CANADA'S LIVESTOCK AND MEAT INDUSTRY

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SUMMARY

Canada has large land resources available for producing livestock feed, but its livestock production has been largely tied to the domestic demand for meat, and has expanded as population and per capita consumption have increased. Several factors have discouraged the industry's expanding for export sales: The long distances from the potentially large livestock-producing areas in the west to the big European markets; the large supplies of cheap beef available to these markets from other sources; and the tariff and quota restrictions that tend to limit the market for cattle and beef in the United States.

Canada has, however, made large shipments of cattle to the United States from time to time, and is expected to continue to produce a sizable number of feeders for sale in this market when conditions are favorable. Also, it is expected to continue its sales of specialty pork products here. Cattle exports to the United States reached record numbers in 1958, when U.S. cattle numbers were down and feeder cattle prices were extremely high. They dropped sharply in 1959 and 1960, however, when demand for feeders in Canada increased and prices in the United States declined.

Now, cattle numbers in Canada, following the same trend as in the United States, are at an alltime high. The buildup will probably continue for several years before reaching a peak. In 1960, cattle slaughter is estimated at about 12 percent larger than in 1959. Marketings are likely to continue upward also in 1961 and 1962.

Hog slaughter, on the other hand, dropped sharply by 20 percent during 1960, (after a 27-percent increase in 1959) as a result of a change in the government's hog price support program. Such short cyclical movements have been characteristic of Canadian hog production, and will probably continue.

IMPORTANCE OF LIVESTOCK INDUSTRY

Despite rapid growth in other activities, agriculture continues as Canada's most important primary industry, and livestock production as the most important segment of this industry. During 1957-59, income from livestock, including dairy and poultry, was equivalent to $1.7 billion annually, or 62 percent of the total cash income received from farming. More than half (53 percent) of this was derived from the marketing of cattle, hogs, and sheep.

Cattle

Numbers of cattle on farms in Canada, as of December 1, reached an alltime high of 10.5 million head in 1959. This represented an increase of 21 percent over the 1950-54 average, with all of the increase occurring in beef cattle. The dairy cow population has remained virtually unchanged at about 3 million, while the number of beef cows has more than doubled since 1950 and now constitute 40 percent of the total cow numbers, about 2 million.

TABLE 1.--Livestock: Numbers on farms, average 1950-54, annual 1956-59

Year[1]	Cattle and calves	Hogs	Sheep and lambs
	1,000 head	1,000 head	1,000 head
Average:			
1950-54	8,673	4,730	1,047
Annual:			
1956	10,379	4,561	1,079
1957	10,293	5,160	1,112
1958	10,112	6,880	1,141
1959	10,489	6,417	1,188

[1] As of December 1 of year shown.

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

TABLE 2.--Livestock: Numbers, by Province, 1959

Province	All cattle	Cattle other than milk cows	Hogs	Sheep and lambs
	1,000 head	1,000 head	1,000 head	1,000 head
Maritime Provinces[1]	400	220	184	100
Quebec	1,794	730	1,168	158
Ontario	3,050	2,042	2,085	255
Manitoba	832	621	475	51
Saskatchewan	1,678	1,432	732	126
Alberta	2,355	2,085	1,710	440
British Columbia	380	287	63	58
Total	10,489	7,417	6,417	1,188

[1] Prince Edward Island, Nova Scotia, and New Brunswick.

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

In the past, cattle numbers in Canada have tended to follow the same cyclical trend as in the United States. The buildup in Canadian cattle numbers will probably continue in 1961 but at a slower rate than during the previous 2 years. Numbers are expected to reach a peak in 1962 or 1963. Cattle slaughter, which increased significantly in 1960, is likely to be still larger in 1961, with a further expansion predicted for 1962.

The three western Prairie Provinces, Alberta, Saskatchewan, and Manitoba, form the principal beef cattle producing area and together had 55 percent of the beef cattle

population in 1959. Most of the remainder were in the eastern Provinces of Ontario, with 28 percent of the total, and Quebec, with 10 percent.

In these two Provinces, the dairy industry is largely concentrated; almost 70 percent of the country's milk cows are to be found here.

The Hereford is the predominant beef breed for the country as a whole, with Shorthorns second and Aberdeen-Angus third. In some regions, such as northern Alberta, Shorthorns are the most popular breed. In recent years, Hereford and Aberdeen-Angus crosses have gained attention in the southern part of the Prairie Provinces. There are a few herds of Charolais, Santa Gertrudis, and similar breeds, but most ranchers feel that the Canadian climate is too cold for this type of cattle.

Hogs

In 1958, Canadian hog numbers reached 6.9 million head, the highest level attained since World War II. Although there was a decline of almost a half million head during 1959, the December 1 estimate of 6.4 million head was 36 percent above the 1950-54 average.

There was a sharp cutback of about 20 percent in production in 1960 following a change in government policy which reduced the hog support price and limited government assistance to deficiency payments based on an annual marketing quota of 100 Grade A and B hogs per producer. Because of the strong hog market during the latter half of 1960, increased hog farrowings are forecast for 1961.

The Yorkshire is by far the most popular breed of hogs in Canada. Experiment stations have recently released a new hybrid breed, known as the Lacombe, to commercial breeders. Several advantages of this breed over the Yorkshire are claimed, including superior conformation and more efficient feed conversion. The breeds which predominate in the United States are not popular in Canada because Canadian grading standards restrict the top grades to a leaner type hog.

The hog population is concentrated in Ontario Province which had 32 percent of the 1959 total, in Alberta with 27 percent, and Quebec with 18 percent. Most of the remaining hogs were in the other two Prairie Provinces.

Sheep and Lambs

Following World War II, sheep and lamb numbers declined by 50 percent within 5 years. Recently numbers have shown slight annual increases, with the 1.2 million head estimated for 1959 being 13 percent larger than the 1950-54 average. The sheep and lamb population is expected to increase through 1961, although lamb prices will probably be lower.

Alberta is the most important sheep raising Province, accounting for 37 percent of the total numbers in 1959. The three Prairie Provinces together had 52 percent of the total sheep and lamb population. In eastern Canada, the sheep raising industry is located largely in Ontario and Quebec, which together had 34 percent of the 1959 total.

LIVESTOCK REGIONS

Canadian livestock production is located in a long, narrow strip of country extending from the Atlantic Ocean to the Pacific along the U.S. border. The average width of this strip is less than 200 miles, and only in Alberta is it more than 500 miles wide. Furthermore, the agricultural lands of eastern Canada are separated from those of the Prairie Provinces by almost a thousand miles of rocky, largely barren, terrain known as the Canadian Shield. The Pacific Coast Province, British Columbia, is separated from the

Prairie Provinces by an extension of the Rocky Mountains. Expansion to the north of this long strip is limited by such factors as the cold climate, submarginal soil, and low elevation.

Eastern Canada is a region of relatively small diversified farms. The most important livestock enterprise is dairy farming, but the production of meat animals is gaining in importance. Beef cattle production is important in limited areas, mostly in the western and southern parts of the Niagara Peninsula in Ontario Province. These operations vary from the feeding of small numbers of locally raised cattle to the commercial feed lots which handle from several hundred to as many as 5,000 head of cattle, which are generally shipped in from the Prairie Provinces.

Canadian cattle on range and in feedlot of Alberta. This and the other two Prairie provinces are the nation's big beef cattle producers.

Hog production is found on a large proportion of the farms in eastern Canada, but the number of sows kept per farm is low. Many of the hogs are raised on dairy farms to utilize the skim milk, but the number of large-scale operations that feed grain is increasing.

Some 43 percent of the total sheep numbers are found in eastern Canada. About half of them are in Ontario Province and the remainder are fairly widely distributed throughout the farming districts of Quebec and the Maritime Provinces. About one-fifth of the farms keep some sheep but the number of animals per farm is small. Large lamb feeding operations have tended to shift to cattle feeding in recent years because of more favorable market prices for the latter.

The Prairie Provinces produce a large surplus of meat animals, which, because almost three-fourths of the people live in eastern Canada, must be shipped long distances to reach the major consuming centers. This region also produces a large number of feeder cattle which are exported to the United States and shipped to eastern Canada.

Most of the cattle in the three Provinces are raised on farms in conjunction with wheat farming, but a significant number are produced on rangeland. Where topography and soil are not adaptable for crops, there are large-scale cattle ranches dependent upon grazing, with some supplemental feeding of hay during the winter months. These ranches produce most of the good quality feeder calves and steers that are fed by local farmers or shipped to eastern Canada or the United States.

The number of cattle fed locally in the Prairie Provinces has increased during the past few years, part of a noticeable trend toward diversification. Although some cattle are fed in most farming areas of the Prairie Provinces, the cattle feeding industry tends to be concentrated in the irrigated section of southern Alberta, where it is associated with the utilization of byproducts from sugar beet and vegetable production, and in central Alberta, where cover crops and locally grown feed grains are utilized.

In 1959, about 60 percent of the hogs in the Prairie Provinces were located in Alberta, with the heaviest concentration in the vicinity of Edmonton. Approximately two-thirds of the farmers keep some hogs, and about 10 percent of the hog producers usually raise over 100 head each.

Most of the sheep are located on rangeland in southern Alberta and southwestern Saskatchewan. Practically all of the sheep range is also suitable for cattle. Because sheep numbers have declined by some 50 percent since 1945, cattle have replaced sheep on a large proportion of the rangeland. A significant number of sheep are raised on farms distributed generally over the grain growing areas. However, it is estimated that only about 5 percent of the farmers raised sheep in 1959.

In 1959, the Prairie Provinces had 52 percent of the Canadian sheep numbers, almost three-fourths of which were in Alberta.

The third livestock region lies between the Rocky Mountains and the Pacific Coast range in the Province of British Columbia. Here is a vast plateau cut by deep river valleys. Most of the cultivated crops are on irrigated land in the valleys. In the plateau region are the largest cattle ranches in Canada. These make extensive use of open range and land leased from the government. The carrying capacity of most of this land is exceedingly low. Because of this limitation only around 4 percent of the beef cattle in Canada are located in British Columbia. On the irrigated farms, most of the cattle are milk cows.

Hog production is of minor importance in this Province. Only around a third of the farmers keep hogs and these have a relatively small number.

There are a few large sheep ranches, located mostly in the southern part of the central plateau. In addition, there are occasional farm flocks, but the 58,000 head of sheep in the Province in 1959 was less than 5 percent of the national total.

PRODUCTION METHODS

Because of the geographical relationship and the close financial and commercial ties between Canada and the United States there is a close similarity in livestock production methods.

Cattle numbers in Canada tend to follow the upward and downward trends of the U.S. cattle cycle. The same breeds of beef cattle are found in Canada that are raised in the adjoining part of the United States. Over the years there has been considerable trade in breeding stock between the two countries, and as a result most of beef cattle now have the same blood lines.

Although some corn is grown and fed in Ontario Province, barley is the principal feed grain used for fattening cattle in Canada as a whole. In the Prairie Provinces, corn has not been grown successfully because of the cold climate, except in a small section of

Manitoba. In many parts of western Canada, it is customary to mix wheat and oats with barley for fattening cattle. Byproducts from sugar beet and vegetable production are fed in southern Alberta, along with some supplemental grain. The rangeland cattle operators harvest a large quantity of wild hay for feeding to foundation stock during the winter. In the farming regions, oat and barley straw and tame hay are fed during the winter. Some irrigated farms are beginning to grow alfalfa for pasture and hay, but the total acreage as yet is relatively small.

In eastern Canada, where because of adequate rainfall irrigation is not required, the acreage in alfalfa is fairly significant. Some oilseed meal is used as a source of protein in cattle rations. Most of the meal is imported from the United States. Byproducts from vegetables, sugar beets, and wheat flour milling are fed extensively in the Niagara Peninsula region of Ontario.

Many of the larger ranches in western Canada lease the major proportion of the grazing land from the Provincial governments. In the Prairie Provinces, a number of community pastures have been established on land found to be unsuitable for wheat production. These pastures have been fenced, the abandoned wheat land planted to pasture grasses, and watering facilities installed. Ranchers are assigned equal quotas of cattle to be put on the community pastures and pay monthly fees on a per head basis.

One of the principal differences between the cattle industry in the United States and Canada is that the degree of finish to which the animals are fed has been substantially less in the latter. In Canada there is reported to be as yet a limited demand for slaughter cattle that would grade U.S. Choice or higher. However, since 1956 the demand for this quality of cattle has been increasing, mostly in the hotel and restuarant trade.

As yet, there are practically no very large, fully mechanized feed lots in Canada. A few operators handle as many as 5,000 head of cattle on feed at a time, but most of them feed less than 500 head. A number have small mills for crushing grain and augers for moving the grain into storage bins and from bins to the mill, but few have conveyors for moving the feed to the cattle. Generally, this is done with a tractor-drawn wagon.

There are probably more differences than similarities between the Canadian and United States hog industries. Over the long term, however, the cyclical movements in hog numbers in the two countries have been in fairly close agreement as to direction and duration, but have varied considerably in degree of change.

The popular Yorkshire breed is of minor importance in the United States. The major U.S. breeds are not popular in Canada since they carry too much fat to meet the standards for the top grades. Furthermore, there is no extensive Canadian market for heavy butcher hogs such as exists in the United States.

Barley is the principal feed grain used in Canada for fattening hogs, although increasing quantities of other grains and protein meal are being used. In Alberta Province, the volume of hog production is closely correlated with the supply of barley, and hog numbers tend to be concentrated in the principal barley growing areas.

In eastern Canada, skimmed milk, buttermilk, and whey are important hog feeds, particularly on the smaller farms where most of the feed grain production is fed to dairy cows. The larger farms and commercial hog producers feed mainly barley, generally with some protein and mineral supplement.

Sheep in western Canada are located in the same general areas as cattle, but are usually run on the poorer grazing lands. Only enough supplementary feed is used to carry the animals during the periods when the pastures are covered with deep snow. The lambs produced on these ranges are sold as feeders or contracted out to grain farmers to be fed on a gain basis. Supplies of feeder lambs have decreased sharply in Alberta and Saskatchewan because of the decrease in range sheep flocks.

In British Columbia, lambs are moved to slaughter in the early fall after being pastured on grass during the summer months.

Commercial lamb feeding is quite limited and continues to decline in importance although government price supports may possibly reverse this trend. It is largely confined to a few sections in Alberta and Ontario.

POTENTIAL FOR INCREASED PRODUCTION

Canada has very little first-class undeveloped agricultural land, and what there is has been found quite expensive to develop. Most of northern Canada was denuded of soil in glacial times. Rock outcrops, with peat and muskeg in the depressions, give no hope for major developments. Immediately to the north of the present cultivated area is a less-barren forested zone where there are tracts variable in size and of potential promise totaling perhaps 50 million acres. However, development of this must wait until the price of agricultural products in relation to costs of production has increased greatly - a delay of perhaps several decades, if not generations. Ultimate development will probably be with forage crops and livestock, an expensive form of agriculture when winters are long and hard.

In the immediate future, therefore, the potential for increased livestock production lies in a shift in land use. In the more humid areas of the Prairie Provinces, already largely a mixed farming region, there is a trend toward putting more land in tame hay and forage crops by reducing the acreage in summer fallow. It is estimated that there are about 6 million more acres in fallow than can be justified by experimental results.

Productivity and returns are smaller under a system of mixed farming that uses forage crops than for a cereal-fallow rotation in the drier parts of these Provinces, where high-quality wheat is produced. Any major change from the cereal-fallow rotation, which is well adapted to this region, would occur only as a result of wheat becoming considerably less profitable as a crop than it is now.

In Ontario and Quebec Provinces, the major changes will be in intensity of production, using more fertilizers and improved management of hay and pastureland to increase the production of livestock. The impact of these changes is likely to be particularly high in Quebec, where leading farmers have already taken advantage of these new practices. Nethertheless, the area and distribution of crops will probably not change enough to represent major shifts in land use.

Similarly, in the Maritime Provinces, a much more intensive use of hay and pastureland is foreseen, but no significant shift in acreage or land use. Since much of the land is better suited to grazing than to arable crops, it is likely that in the future beef will be of increasing importance to the region.

The volume of livestock production in Canada has been largely adjusted to supplying the domestic demand for meat, with production expanding as the population and per capita consumption increase. Canadian agricultural policy has been to produce grain for export rather than to market the grain through livestock and export the meat. There are several factors which discourage the latter, including the long distance from the potentially large livestock producing Prairie Provinces to the Atlantic Seaboard, the large supplies of cheap beef available in Europe from other sources, and the tariff and quota restrictions that tend to limit the market for cattle and beef in the United States, except during the low phase of the U.S. cattle cycle.

MARKETING PRACTICES

Livestock marketing methods and the type of facilities used are quite similar to those in the United States. Officially designated public stockyards operated under the joint supervision of the Canadian Department of Agriculture and the provincial

governments are located at Toronto and Montreal in eastern Canada and at eight livestock marketing centers in the Prairie Provinces. The stockyards located at Toronto, Winnipeg, and Calgary together handled 63 percent of the cattle marketed through the public stockyards in 1959. Toronto, Edmonton, and Winnipeg, the principal hog marketing centers, accounted for 65 percent of the hogs moved through public stockyards in 1959.

Livestock offered for sale at these markets are consigned to commission firms who operate on a fee basis. Formerly, sales were made by direct negotiations but, by the middle of 1960, all public stockyards had shifted to auction selling.

In Ontario, all hogs produced within the Province must be marketed through the Ontario Hog Producers Marketing Board--a Board elected by the Ontario hog producers. Hogs are sold direct to packers on an allocation basis, f.o.b., country collection points.

Livestock at these markets are bought by packer buyers, who procure animals for slaughter at nearby packing plants; by order buyers who buy for interests outside the market; and by traders who buy and sell on their own account. At the principal markets, these interests are organized into livestock exchanges, which are permitted to establish trading rules and regulations subject to approval of the Dominion Department of Agriculture and of the provincial government.

Auction selling developed as a result of the growth of local auction markets, which have spread rapidly over most of Canada. Most of the livestock sold at these yards goes direct to packing plants, to feed lots, or for export. As a result, the proportion of animals going through the public stockyards has been sharply reduced.

There are cooperative selling agencies at most of the stockyards. These are frequently affiliated with cooperative livestock feeder operations.

Packing plants also buy livestock direct from producers either at the plant or on the farm. Because hogs are sold on the basis of carcass grades and quality premium payments are made only to producers, most hogs go directly to packing plants as the property of the producer.

In 1959, inspected packing plants received 55 percent of the slaughter cattle and 41 percent of the calves from the public stockyards and the remainder direct from country points. In addition, the stockyards handled approximately 600,000 head of feeder cattle and calves. Only 11 percent of the hogs slaughtered at inspected plants in 1959 moved through the stockyards.

Livestock are moved in and out of the stockyards by truck and rail. However, transport by rail is now largely limited to shipments from the Prairie Provinces to eastern Canada and even here competition from trucks is gaining.

The marketing of livestock is controlled by the Provincial Governments, which have responsibility for marketing legislation, but it is supervised by the Canadian Department of Agriculture, which maintains offices at all of the stockyards for the purpose of market reporting, livestock grading, and record compiling. Daily price quotations on a liveweight basis are reported for various classes of cattle, calves, sheep, and lambs, while hog prices are based on the dressed carcass at packing plants. Market conditions, sales of livestock by grades, movement of animals to packing plants, average prices by grades, and a large volume of other pertinent information is compiled on a weekly and monthly basis.

LIVESTOCK PRICES

The Canadian livestock market tends to be influenced strongly by livestock prices in the principal U.S. markets, particularly the level of prices at Chicago. Whenever marketings of slaughter cattle are limited to what the domestic market will absorb, the Canadian price may reach a maximum of the Chicago price, plus freight, duty, and other

TABLE 3.--Livestock prices: U.S. and Canadian, selected types, average 1951-55, annual 1956-59, and by month 1959-60

Period	Steers		Barrows and gilts	
	Chicago	Toronto	Chicago	Toronto
	Good 900-1100 lb.	Choice All weights[1]	Nos. 1, 2, and 3 200-220 lb.[2]	Grade B[3]
	U.S. cents per lb.	U.S. cents per lb.	U.S. cents per lb.	U.S. cents per lb.
Average:				
1951-55	25.19	23.95	20.74	21.82
Annual:				
1956	19.54	20.38	15.53	20.20
1957	21.42	20.97	18.93	23.51
1958	25.66	24.80	21.01	21.74
1959	26.26	27.16	15.21	18.61
1959:				
January	27.08	28.51	17.38	18.66
February	26.20	26.83	16.15	18.46
March	27.00	26.16	16.44	18.56
April	27.82	26.69	16.73	18.68
May	27.40	26.61	16.94	18.69
June	26.79	26.36	16.88	19.08
July	26.42	27.24	14.90	19.20
August	26.04	27.89	14.67	18.86
September	26.09	28.41	13.84	18.91
October	25.54	27.61	13.16	18.02
November	24.91	27.68	13.06	17.88
December	23.82	26.16	12.42	17.89
1960:				
January	24.62	23.73	13.09	17.54
February	24.72	22.84	13.95	16.81
March	25.28	22.88	15.78	15.40
April	25.22	23.15	16.48	15.68
May	24.63	23.39	16.78	16.66
June	23.45	23.62	17.56	19.15
July	23.22	24.46	18.25	19.07
August	22.95	24.66	17.11	19.64
September	22.96	24.57	16.84	20.45
October	23.54	23.69	17.82	19.99

[1] Up to 1,000 lb. prior to 1958. [2] Choice barrows and gilts prior to January 1955.
[3] Grade B 1 prior to October 1959.

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

costs to Toronto. Any further increase in price results in the movement of U.S. slaughter cattle into the Canadian market such as took place in the fall of 1959. Approximately the same situation prevails for other classes of livestock except live hogs, which must be held for 30 days in quarantine, as well as meat.

Livestock prices in the Prairie Provinces of western Canada tend to be based on the Toronto market minus freight and handling costs to that market. For example, the average price of good slaughter steers for the 5 years 1954-58 was $19.92 per 100 lbs. at Toronto compared to $18.70 at Winnipeg. Grade A hog carcasses during the same period averaged $29.10 at Toronto and $26.31 at Winnipeg.

Order buyers in Alberta report that local feeder cattle prices must be at least $5.00 per 100 lbs. below those in the U.S. Corn Belt before exports to that market can be profitable.

Government minimum price supports have had an important influence on livestock prices at various periods.

GOVERNMENT ASSISTANCE TO PRODUCERS

Livestock prices have been supported by the Canadian Government since 1944. Current supports are based on the Agricultural Stabilization Act, which became effective in March 1958. Under provisions of this legislation the support level on cattle, hogs, and lambs is equivalent to 80 percent of the base price, which is a 10-year moving average of market prices. Whenever prices have gone below the support level, the government has purchased carcasses in an effort to bring prices up to the support level. However, such a surplus of pork was accumulated under this system during 1959, that the government was forced to change to a limited deficiency payment plan in supporting the hog market. Effective in January 1960, this program limited participation to total marketings of 100 hogs per producer. The deficiency payments are based on the amount by which the national average market price falls short of the support price.

Of help to the livestock industry in eastern Canada have been freight rate assistance payments on shipments of feed grains from the Prairie Provinces to this area. This payment has amounted to about $18 million annually for the past 10 years.

The Prairie Farm Rehabilitation Act, passed in 1955, provides for the reclamation of arid and abandoned wheat farmland in Manitoba, Saskatchewan, and Alberta Provinces. It is under this Act that the community pastures have been developed and used by neighboring farmers. This agency has also constructed irrigation facilities from which water is being used to produce alfalfa and other forage crops.

Disaster relief from heavy snow storms and other abnormal weather conditions have been provided by the Federal Government in the form of payment of half the transportation costs on shipments of feed for livestock.

Loans have been made to farmers for the purchase of livestock, fencing, drainage, and pasture improvement under the Farm Improvement Loan Act since 1945.

Compensation is paid by the government for livestock slaughtered under disease eradication control programs.

ORGANIZATION OF THE MEAT INDUSTRY

Organization of the Canadian meat industry is much like that of the United States. Livestock slaughter and meat distribution are handled by three types of organizations. The large packing company, which moves meat products into local, interprovincial, and international trade; the small independent packer, who distributes meat largely into local, but also into interprovincial and occasionally into international, channels; and the local butcher, who slaughters for his own retail establishment.

There are three large packing companies operating in Canada, two of which are domestic corporations and the other a subsidiary of a major U.S. meat packer. As a rule,

TABLE 4.--Livestock: Slaughter by type, average 1951-55, annual 1956-59

Year	Cattle	Calves	Hogs	Sheep and lambs
	1,000 head	1,000 head	1,000 head	1,000 head
Average:				
1951-55	1,962	1,145	6,817	685
Annual:				
1956	2,441	1,337	6,889	762
1957	2,603	1,381	6,516	767
1958	2,324	1,431	7,766	727
1959	2,216	1,185	9,883	749

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

TABLE 5.--Livestock: Commercial and total livestock slaughter, by type, 1958

Type	Slaughter by packers	Custom slaughter	Total commercial slaughter	Slaughter by retail butchers and farmers	Total slaughter
	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head
Cattle	1,724	258	1,982	342	2,324
Calves	729	144	873	558	1,431
Hogs	5,982	195	6,177	1,589	7,766
Sheep and lambs	559	19	578	149	727

Slaughtering and Meat Packing Industry, Dominion Bureau of Statistics, Ottawa, 1959.

these companies deal only in wholesale distribution. Each has branch houses in cities other than where their plants are located to permit nationwide distribution of merchandise. They also have representatives in foreign countries to handle the distribution of export products.

Some of the independent packing companies distribute meat products over a considerable area around the point where plants are located. They also export pork and beef to the U.S. market. A number do custom slaughtering for local retail trade, for shipment to the large cities, and also for other packers. The volume of custom slaughtering particularly for grocery chain stores is reported to have increased in recent years.

In 1958, there were 178 meat packing plants operating in Canada, compared to 160 the year before and an average of 154 during 1951-55. The three large packers were listed as owners of 24 of these, while the remainder were operated by the independent companies. Of the 178 plants, 75 had less than 20 employees, while 27 employed more than 300 persons. In addition, there were an undetermined number of public abbatoirs and

other custom slaughters. This latter group reported handling 10 percent of the commercial cattle and calf slaughter and about 2 percent of the hog and lamb kills.

Statistics on the number of animals slaughtered by retail butchers are not available. However, the difference between the commercial wholesale slaughter performed by packers and custom slaughterers and the total number of animals killed represents the quantity slaughtered by retail butchers and farmers together. In 1958, this amounted to 15 percent of the cattle slaughtered, 39 percent of the calves, and 20 percent of the hogs and lambs. It is roughly estimated that retail butchers slaughter one-third of these cattle and perhaps half of the calves, hogs, and lambs.

SLAUGHTER TRENDS

Cattle slaughter for 1960 is estimated at approximately 2.5 million head, only slightly below the alltime high established in 1957. There has been an upward trend in cattle slaughter since World War II. The annual kill is now running about 450,000 head larger than 10 years ago. Stronger domestic demand for beef because of the growth in population and an increase in per capita consumption is attributed as the primary reason for the increase.

Cattle are now being fed to higher finish and weights than formerly. The average dressed carcass weight of cattle slaughtered has increased annually since 1956. Carcasses at Federally inspected plants averaged 521 pounds in 1959, compared to 495 pounds in 1956. The quality of carcasses has also been improved by more finish feeding. In 1960, 32 percent of the beef carcasses graded "Choice," compared to 28 percent the previous year and 24 percent in 1958.

TABLE 6.--Livestock: Slaughter in Federally inspected plants, total slaughter, and proportion of inspected to total slaughter, by type, 1959

Type	Inspected slaughter	Total slaughter	Proportion of inspected to total
	1,000 head	1,000 head	Percent
Cattle	1,744	2,216	79
Calves	677	1,185	57
Hogs	8,021	9,883	81
Sheep and lambs	570	749	76

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

Calf slaughter, after increasing annually for 6 years and reaching a 10-year high in 1958, dropped sharply by 17 percent in 1959. This decline is attributed to a trend of breeding more dairy cows to beef breeds and raising the steer calves to heavier weights. The trend has been accelerated by the availability of artificial insemination service from beef type bulls in eastern Canada, the area producing most of the veal calves.

Total hog slaughter in 1959 showed a 27-percent increase over 1958. Hog marketings at inspected plants during 1959 established the second highest yearly output on record, being exceeded only by the alltime high slaughter of 1944. A sharp cutback in production which began near the end of 1959 resulted in a reduction of about 20 percent in hog slaughter in 1960. The decline resulted from a change in the government hog price support program which was altered to limit support payments to 100 hogs per producer.

Hog carcasses averaged 161 pounds at inspected plants in 1959, compared to 164 pounds during the 2 previous years and 162 pounds for 1951-55. The overall quality of hogs graded during 1960 showed some improvement, with the number of grade A carcasses accounting for 29.6 percent of the total, compared with 29.5 percent in 1959 and 28.7 percent in the previous 2 years.

Sheep and lamb slaughter averaged approximately 750,000 head annually for the period 1956-60. Although this represented some recovery from the low level of the early 50's, the long-term trend has been downward, as evidenced by an annual average slaughter of 1.1 million head during 1946-50.

The average weight of sheep and lamb dressed carcasses in 1959 was 44 pounds, a figure that has not varied significantly for many years.

INSPECTION AND GRADING

All meat moving into inter Provincial and international trade must come from Federally inspected plants. This inspection covers sanitary control of plant operations and health control of animals slaughtered and meat produced. Federal inspection is not required for meat distributed locally or within a Province but such meat is subject to municipal and provincial sanitary control. In 1959, 79 percent of the cattle and 81 percent of the hogs were slaughtered in inspected plants, a proportion which has not changed significantly in recent years. The proportion of calves slaughtered under inspection declined from 67 percent of the total kill in 1956 to 57 percent in 1959.

The Canadian system of grading for cattle and calves is closely similar to that used in the United States. There are four grades for slaughter steers, heifers, and calves - Choice, Good, Medium, and Common. However, Choice, the highest Canadian grade, is, in the general opinion of members of the livestock and meat industry, more nearly equivalent to U.S. Good than to U.S. Choice. In addition to the above grades, there is a canner and cutter grade for cows.

Because of the trend toward more finish feeding, almost 75 percent of the slaughter steers marketed in 1959, graded Good and Choice, compared to less than 50 percent in 1956. There was also an improvement in the quality of heifers, with 49 percent falling in the two upper grades in 1959 compared to one-third in 1956.

There are three grades of slaughter lambs, Good, Common, and Bucks. Approximately 70 percent of the slaughter lambs were in the top or good grade in 1959.

There have been no live grades for hogs since 1936 when grading was shifted from a live to a carcass basis. Carcass grading of all hogs is compulsory at all plants where grading is maintained. There are 11 grades of hog carcasses. In addition to Grades A, B, C, and D, and two grades of sows, there are special categories, such as Light and Heavy. To encourage the production of hogs with the high proportion of lean meat to fat that the top grades strongly emphasize the Dominion Government had for a number of years paid a bonus of $2 and $1 a head on hogs grading A and B, respectively. In October 1960, the premium on Grade A hogs was raised to $3 and that on B hogs discontinued. Since this bonus is payable only to the producer, it is necessary to maintain identity of ownership until the hog has been dressed and graded. This is accomplished by tatooing a number on the shoulder of each hog. Besides the government bonus, there is a market price differential of $1.00 per 100 pounds between the A and B grades, which was established by an agreement between processors and producers.

For 5 years, 1955-59, almost 80 percent of the hog carcasses have been placed in the two top grades. However, there has been only a slight change in the proportion of Grade A's - from 27.1 percent of the total in 1955 to 29.5 percent in 1959. The change in bonus rate is designed to encourage an increase in the production of Grade A hogs.

There are 11 Canadian grades of beef carcasses. In addition to Choice, Good, and Standard, there are three subgrades, each under Commercial, and Utility and also a Manufacturing grade. In 1959, 28 percent of the carcasses slaughtered at inspected plants graded Choice, 17 percent Good, 9 percent Standard, and most of the remainder Utility and Manufacturing. The proportion of carcasses in the top grade has increased annually since 1956, when only 19 percent were graded Choice.

MEAT PRODUCTION

Canadian meat production in 1959 reached a postwar high of 2,560 million pounds, only slightly less than the alltime high of 2,620 million pounds established in 1944. Although beef and veal production showed a decline from the 2 previous years, this was more than offset by a sharp increase in pork output.

TABLE 7.--Meat: Production by type,[1] average 1951-55, annual 1956-59

Year	Beef and veal	Pork excluding lard	Mutton and lamb	Total
	Million pounds	Million pounds	Million pounds	Million pounds
Average:				
1951-55	1,085	879	30	1,994
Annual:				
1956	1,323	887	32	2,242
1957	1,439	847	33	2,319
1958	1,314	1,013	32	2,359
1959	1,261	1,266	33	2,560

[1] Cold dressed weight not including variety meats (edible offal); for hogs also not including fats.

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

Beef and veal production reached a record high of 1,439 million pounds in 1957. Production during 1959 was 12 percent below this level but the output in 1960 is expected to approach the 1957 level, while a further increase is predicted for 1961.

Pork production reached 1,266 million pounds in 1959, a quantity exceeded only during World War II. A 20-percent decline is estimated for 1960 but it is expected that the downward trend will be reversed in 1961.

Mutton and lamb production averaged 33 million pounds for the years 1955-60. This is approximately half of the tonnage produced during and immediately following World War II.

DOMESTIC MEAT CONSUMPTION

Total Canadian meat consumption in 1959 was approximately 2.5 billion pounds, an increase of more than 25 percent over the 1951-55 average. Per capita consumption of meat has also increased, totaling 143.1 pounds in 1959 compared to 133.8 pounds during 1951-55. Beef and veal generally constitute well over half of the meat consumed, while pork accounts for most of the remainder. Consumption of lamb and mutton is relatively small, usually about 2 percent of the total meat consumed. The per capita consumption of beef and veal in relation to pork has tended to shift substantially whenever there is a surplus of one or the other.

PRODUCTION OF OTHER LIVESTOCK PRODUCTS

The most important livestock byproducts produced in Canada are lard, tallow, variety meats, and hides and skins. Lard and variety meat output reached record levels in 1959 as a result of high hog slaughter. Tallow production was up slightly over the previous year. Cattle hide production was at a high level in 1959 compared to the 1951-55 average, but showed some decline from the previous 3 years.

FOREIGN TRADE

Most of the livestock produced in Canada is slaughtered and consumed domestically. However, there has usually been some foreign trade in live animals and meat, and for certain periods exports have accounted for a substantial proportion of the total livestock marketed and meat produced.

TABLE 8.--Meat: Total and per capita consumption by type, carcass weight, average 1951-55, annual 1956-59

Year	Beef and veal	Pork excluding lard	Mutton and lamb	Variety meats	Canned meats	Total
Total consumption:						
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Average:						
1951-55	1,038	764	34	74	69	1,979
Annual:						
1956	1,296	796	41	85	86	2,304
1957	1,391	767	44	89	85	2,376
1958	1,255	882	46	82	96	2,361
1959	1,254	1,019	53	89	75	2,490
Per capita consumption:						
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Average:						
1951-55	69.5	51.6	2.3	5.0	5.4	133.8
Annual:						
1956	80.6	49.5	2.6	5.3	4.9	142.9
1957	83.8	46.2	2.6	5.3	4.6	142.5
1958	73.6	51.7	2.7	4.8	5.2	138.0
1959	71.9	58.4	3.0	5.1	4.7	143.1

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

Live cattle and calf exports were relatively large during 1948-51 and again from 1957 to 1959. They reached a postwar high of 670,000 head in 1958. All shipments except a few thousand head, consisting mostly of breeding stock, have been to the United States.

Approximately three-fourths of the cattle exports during recent years have been feeders and stockers, practically all of which have gone to the U.S. Corn Belt, and northern Plains States. Slaughter cattle have made up about 15 percent of the exports, most of which have gone to the U.S. Pacific Northwest in recent years. The remainder of the exports have consisted of pedigree breeding cattle and dairy cows.

In general, buyers in the United States initiate the cattle trade with Canada, usually through orders given to commission firms in Canada to buy specific kinds of cattle. Slaughter cattle are largely bought on orders from packers in the United States, but some are shipped from feedlots in Ontario to public markets in the United States on consignment.

TABLE 9.--Livestock products: Production by type, average 1951-55, annual 1956-59

Year	Lard	Tallow	Variety meats	Cattle hides	Calf skins	Sheep skins
	Million pounds	Million pounds	Million pounds	1,000 pieces	1,000 pieces	1,000 pieces
Average:						
1951-55	128	126	84	1,962	1,145	685
Annual:						
1956	126	174	92	2,441	1,337	762
1957	116	190	93	2,603	1,381	767
1958	145	176	94	2,324	1,431	727
1959	192	201	102	2,216	1,185	749

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

TABLE 10.--Livestock: Exports by type, total and to the United States, average 1951-55, annual 1956-59

Year	Cattle and calves		Hogs		Sheep and lambs	
	Total	U.S.	Total	U.S.	Total	U.S.
	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head
Average:						
1951-55	96	94	12	12	9	9
Annual:						
1956	57	50	2	1	5	4
1957	388	384	2	1	18	17
1958	670	667	8	8	41	41
1959	342	340	5	4	30	29

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

TABLE 11.--Livestock: Imports by type, total and from the United States, average 1951-55, annual 1956-59

Year	Cattle and calves		Sheep and lambs	
	Total	U.S.	Total	U.S.
	1,000 head	1,000 head	1,000 head	1,000 head
Average:				
1951-55	4	3	6	6
Annual:				
1956	9	9	19	19
1957	6	6	29	29
1958	4	4	17	17
1959	33	33	43	43

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

TABLE 12.--Meat: Exports and imports by type of product, carcass weight, average 1951-55, annual 1956-59

Commodity	Average 1951-55	1956	1957	1958	1959
EXPORTS					
Beef:	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Fresh, chilled or frozen	44.6	17.0	53.5	61.7	27.7
Pickled in barrels	.8	1.0	1.1	1.4	1.3
Other	.4	.6	.7	.8	1.0
Total	45.8	18.6	55.3	63.9	30.0
Pork:					
Fresh, chilled or frozen	26.6	32.0	22.4	46.8	52.3
Bacon, hams, shoulders and sides, cured or smoked	7.3	8.8	5.2	6.2	6.3
Hams, cooked, not canned	2.7	5.7	3.1	2.6	2.5
Hams, canned	16.3	12.5	5.3	5.9	6.0
Pork, pickled in barrels	6.4	8.1	6.6	6.8	7.5
Other	.6	.8	.9	1.1	1.5
Total	59.9	67.9	43.5	69.4	76.1
IMPORTS					
Beef:					
Fresh, chilled or frozen	2.8	5.3	7.9	12.6	21.0
Pickled in barrels	12.3	13.0	14.1	13.9	15.3
Canned	27.0	21.4	32.0	31.5	30.0
Total	42.1	39.7	54.0	58.0	66.3

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

Exports of hogs have declined to a few thousand head annually since 1955.

In 1958 lamb exports reached the highest level in 10 years. However, this was the only year since 1953 that imports of lambs have not exceeded exports. All but an insignificant proportion of this trade has been with the United States.

During the war and early postwar years, the United Kingdom was the principal foreign market for Canadian beef. Because of competition from other suppliers, this trade has been discontinued entirely since 1954. The United States received all but a small percentage of the Canadian beef exports during the years 1955-59. However, during this period Canada was a net importer of beef, and a substantial proportion of the imports were from the United States.

Canada has a steady export trade in pork products with the United States. A significant proportion of this commerce is in high-quality specialty items, such as hams and boneless smoked loins.

TABLE 13.--Meat: Exports by country of destination, carcass weight, average 1951-55, annual 1956-59

Commodity and destination	Average 1951-55	1956	1957	1958	1959
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Beef:					
United States	27.4	16.2	53.0	61.3	27.2
United Kingdom	15.7	---	---	---	---
Other countries	2.7	2.4	2.3	2.6	2.8
Total	45.8	18.6	55.3	63.9	30.0
Pork:					
United States	50.0	56.6	34.6	60.2	56.1
British West Indies	3.4	8.1	6.7	7.3	7.7
Czechoslovakia	---	---	---	---	2.4
Germany, West	.8	---	---	---	2.3
Japan	---	---	---	---	2.1
Other countries	5.7	3.2	2.2	1.9	5.5
Total	59.9	67.9	43.5	69.4	76.1

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

TABLE 14.--Beef: Imports by country of origin, carcass weight, average 1951-55, annual 1956-59

Country of origin	Average 1951-55	1956	1957	1958	1959
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Australia	11.5	14.2	15.7	17.3	23.6
United States	14.0	17.5	19.2	18.1	20.5
New Zealand	1.1	.6	2.7	7.9	8.4
Argentina	10.5	5.8	13.3	13.7	.8
Other countries	5.0	1.6	3.1	1.0	13.0
Total	42.1	39.7	54.0	58.0	66.3

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

In 1959, for the first time in recent years, Canada imported a significant number of slaughter cattle from the United States. Most of these were received during the fall months, a period when the domestic supply of cattle is seasonally low.

Imports of slaughter lambs during 1959 were the highest in more than 10 years.

TABLE 15.--Lamb: Imports by country of origin, carcass weight, average 1951-55, annual 1956-59

Country of origin	Average 1951-55	1956	1957	1958	1959
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Australia	2.0	3.4	3.4	4.7	13.2
New Zealand	3.2	5.9	6.6	15.8	6.3
Other countries	.6	.3	1.0	1.0	.6
Total	5.8	9.6	11.0	21.5	20.1

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

TABLE 16.--Tallow and greases: Exports by country of destination, average 1951-55, annual 1956-59

Country of destination	Average 1951-55	1956	1957	1958	1959
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
United Kingdom	---	17	26	10	51
Japan	5	6	11	10	14
Union of South Africa	6	14	12	19	13
United States	3	2	5	2	11
Other countries	9	12	7	14	5
Total	23	51	61	55	94

Livestock and Meat Products Statistics, Dominion Bureau of Statistics, Ottawa, 1959.

Beef imports reached a record high during 1959. Australia was the largest supplier, with most of the shipments consisting of canned corned beef. The United States was the major source of fresh and pickled beef.

Approximately 40 percent of the lamb consumed in Canada during 1959 was supplied by imports. Australia supplied considerably over half the imports that year, but New Zealand was the major source for lamb in years prior to 1959.

Tallow is the most important livestock byproduct in Canada's foreign trade. Exports reached an alltime high in 1959. The United Kingdom received well over half of the shipments, with most of the remainder going to Japan and Union of South Africa.

Canada is usually a net importer of lard, all of which generally comes from the United States.

Variety meat exports have increased sharply since 1957. More than 15 million pounds were sold abroad in 1959, mostly to the United Kingdom.

COMPETITIVE ASPECTS

Canada and the United States have a long history of trade in livestock. Although there is some trade each way, most of the volume has been from Canada to the United States. The livestock producers who are most affected by competition in the domestic market from Canada are the western cattle ranchers who produce feeder cattle. Approximately three-fourths of the cattle received from Canada are in this category. Producers of slaughter cattle in the Pacific Northwest are those mostly concerned with the movement of slaughter cattle from Canada.

Cattle imports from Canada reached a record level in 1958. The United States had abundant feed grain supplies and cattle numbers were down by 2.5 million head from 1956. U.S. farmers increased their orders for feeders and prices rose sharply. Soon U.S. buyers were competing with Canadians for feeder cattle which were in abundant supply in Canada. With increased shipment of feeders to the United States, the number of cattle put on feed in Canada dropped sharply, resulting in a shortage of fat cattle, a drop in beef consumption, and a sharp advance in the price of slaughter cattle to a level above U.S. prices. The high prices encouraged Canadian feeders to expand operations and exports to the United States dropped sharply.

The history of the cattle trade with Canada shows that the volume fluctuates widely in accordance with the U.S. cattle cycle. The demand for foreign cattle is strongest during the early buildup period of the cattle cycle when both breeders and packers are bidding against each other for cattle. When cattle numbers are high in the United States, the resulting low prices received for cattle do not attract imports.

Exports of Canadian cattle to the United States began a declining trend in 1959 and continued downward in 1960. For the next year or two it is expected that a strong domestic demand for feeders in Canada and low feeder prices in the U.S. market will keep exports at a relatively low level.

There is a substantial trade in beef between Canada and the United States in both directions but, for the period 1955-59, Canada was a net importer.

U.S. hog producers do not receive significant competition from Canada, since the industry there concentrates on a leaner type hog and most of the pork exports to the United States consist of high-quality specialty items.

There is some competition from Canadian exports of tallow which are sold in the same international markets that are the major outlets for U.S. tallow. A similar situation exists in the foreign trade in variety meats.

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